BEFORE WE move to the overture, allow us to introduce who we are and how this book came to be. It started when a neuroscientist and a musician walked into a gym very early one morning. Dennis, a professional musician, music teacher, and former professor of music at Warner Pacific University in Portland, Oregon, found Larry, a professor of neuroscience at the Oregon Health & Science University School of Medicine, first on stage (fully clothed) at his “Music and the Brain” lectures, and then in the locker room at 6:00 a.m. Through many subsequent discussions in that locker room, we bonded over our shared love of history, literature, science, and everything there is to know and learn about music.

This unlikely beginning led us to where we are, presenting you with Every Brain Needs Music, our book examining how the human brain interacts with music through wholehearted
PRELUDE

listening, singing, and—most effectively—learning to play a musical instrument.

So just who are we?

DENNIS

Saying that I love music is an understatement. At age three, I was a serious listener begging for piano lessons. I began marimba lessons at six, added piano at age eight, and added trumpet at ten, and I continued to study, practice, and play all three instruments throughout my youth. In college, I majored in the pipe organ. I eventually realized that helping others understand and perform music (especially classical and jazz idioms) was just as rewarding as participating in stage, television, and radio performances. I became a professor at Warner Pacific University, where I loved teaching aural skills and piano and directed jazz ensembles, including singers and instrumentalists, for over thirty-seven years. In short, I love making music, teaching music, playing music, and performing on stage for audiences.

LARRY

This book is a natural extension of the talks on the neuroscience of music I have been giving for more than a decade, as well as of my own laboratory research. As a professor at the Oregon Health & Science University, I study ways to repair brain damage in people with diseases like multiple sclerosis and Alzheimer’s. In particular, I study how processes like
myelination, neurogenesis, and the functioning of neurons, topics covered in this book, are regulated in development and disease.

Growing up in La Jolla, California, I loved to tinker at the piano from an early age. At six, my parents took me to see a live performance of Brigadoon at Balboa Park’s Starlight Bowl in San Diego, a fantastic outdoor venue for musical theater. When we returned home, I went directly to the piano and started playing the melodies from memory. I took piano lessons for years until my teacher, frustrated with my tendency to play by ear instead of reading assigned sheet music, advised me to “go out and play in a band or something.” I took this advice, in rock and blues groups off and on through my adolescence and adult life. I eventually combined my passions for neuroscience and music to develop a talk, and now—with Dennis—a book, on music and the brain.

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We hope that the interweaving of music experiences, music teaching, and neuroscience will offer readers unique insights into music, the art of teaching, learning, and creativity. Rather than presenting an extensive review of musicology or of the neuroscience of music, we hope that Every Brain Needs Music will serve as an introduction to the big questions in these fields and will be of interest to anyone who loves music and is interested in gaining insights into how we create music, teach and learn music, and perform and listen to music. However, you may apply the discussions in all the following movements to how
humans teach and learn in general and to the underlying nature of creativity itself. Finally, we hope that this book shows why you should never be afraid to have meaningful conversations with someone when you’re standing, naked, in a locker room at six in the morning.